



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D206-667-107BL
Job Sheet 166584



500241

Part No: D206-667-107BL

Job Qty: 1 ea

Part Name: Fwd Crosstube - Mid Height 206L / L1 / L3 / L4, Blue



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/12/17

Job Tracking No:

Due Date: 10/27/17

Created By: Marie Lajeunesse

Type: Stock

Description:

Customer: Air Evac Lifeteam (CAEVA02)

Air Medical Group Holdings, Concur Invoice Capture C/O (*AEL*), 10700 Prairie Lakes Drive Eden Prairie, MN, 55344 USA ph:(636) 695-5385

Note: DWG DSI9565 REV A, DSI9628 REV A, D206-667-147 REV A (DEO), IIN-D206-667 REV D revA 11.01.13
New Issue EC verified by:DD IPP REV:B 11.08.08 PER ECN 11-615 DD VERF:EC IPP REV:C 12.08.20
DSI9628 revA (ECN12-631) DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time
90	Start up Operation	1 Ea		10/26/17	0.00	0.00	Start up container	
110	Packaging	1 pcs		10/26/17	0.00	0.00	Packaging1	
120	CNC Bend Crosstubes	1 pcs		10/26/17	0.00	4.32	CNC Bend Crosstube	
130	QC	1 pcs		10/26/17	0.00	0.00	QC15	
140	Crosstubes	1 pcs		10/26/17	0.00	2.87	Crosstube	
150	HandFXtube	1 pcs		10/26/17	0.00	0.74	HandFinish5	
160	QC	1 pcs		10/26/17	0.00	0.00	QC7	
170	QC	1 pcs		10/26/17	0.00	0.00	QC5	
180	Outsource	1 pcs		10/26/17	0.00	0.00	Outsource2	
190	Packaging	1 pcs		10/26/17	0.00	0.00	Packaging2	
200	QC	1 pcs		10/26/17	0.00	0.00	QC5	
210	Purchasing	1 pcs		10/26/17	0.00	0.00	Purchasing	
215	Packaging	1 pcs		10/26/17	0.00	0.00	Packaging2	
220	QC	1 pcs		10/26/17	0.00	0.00	QC14	
230	Crosstubes	1 pcs		10/27/17	0.00	2.87	Crosstube	
240	QC	1 pcs		10/27/17	0.00	0.00	QC5	
250	Packaging	1 pcs		10/27/17	0.00	0.00	Packaging1	
260	QC	1 pcs		10/27/17	0.00	0.00	QC4	
265	DC	1 pcs		10/26/17	0.00	0.00	DC	
270	Packaging	1 pcs		10/27/17	0.00	0.00	Packaging3	
280	QC21-FG	1 Ea		10/27/17	0.00	0.00	QC21	

Part Op 120 - Bend tube as per Dwg D206-667-147 using CNC bender program

Descriptions: 140 - ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: ***** 1- Drill holes & ream using drill Jig DT8541 & DT8542 as per Dwg D206-667-147. Drill all (3) top holes. Holes facing inboard. ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: ***** 2- Drill Fwd rivet holes using drill Jig DT8787 fwd as per Dwg D206-667-147. Note: Fwd side has 3x top holes.Facing inboard. 3- C'sink holes as per Dwg D206-667-147. Allow rivet to sit below surface to compensate for paint. 4- Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins .Drill ONLY 2 top holes ONLY plug most bottom holes to prevent accidental drilling. Drill holes and ream using drill Jig DT8541 & DT8542 as per Dwg D206-667-147. Drill only the top (2) holes. ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED

DART
AEROSPACE
S001114



Fwd Crosstube – Mid Height 206L / L1 / L3 / L4, Blue

Dart Aerospace Ltd.

1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

DART
AEROSPACE
S002141 *



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PART NO: D206 – 667 – 107BL

Revision:

Operation:

Quantity:

Change No:

Outsource

1

Mfg Date: 10/25/17

68-6
31
SVD

BY: ***** 5- Drill Aft rivet holes using drill Jig
 150 - ***IMMEDIATELY AFTER GRINDING*** 1- PRESSURE WASH X-TUBE INSIDE AND OUT 2- ALODINE AND ACID ETCH X-TUBE INSIDE AND OUT AS PER QSI005.
 180 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 038Or Issue P/O 038121 LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order
 190 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Ensure copy of NDT results attached to work order. **OCT 23 2017**
 200 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***
 210 - ISSUE PO _____ *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** ***VERIFY BY _____
 BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____
 MASK SCRIBE B# & P# AND VERIFY 1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube as per QSI 005 4.2 PRIME: Start Time: _____ Finish Time: _____
 PAINT: DELFLEET BLUE _____ Start Time: _____ Finish Time: _____ CLEAR DELFLEET B _____
 220 - Wrap in plastic bag to protect from scratches ***VERIFY BY _____ BATCH # TO MATCH W/O _____
 ***VERIFY BY _____ PART # TO MATCH W/O _____
 230 - 1-Abrade mating surfaces of support and crosstube with 400 grit sandpaper, clean the area with 4105S wash 'n' wipe 2-Install supports with Proseal 890 per DSI9565 and QSI 015 A/R Proseal 890 Batch: 138408 3- Torque bolts as per dwg 4-Install nut plates as per Dwg D206-667-147. Touch-up rivet heads with Imron paint. exp 3/18
 240 - ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____
 260 - ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____
 265 - Photocopy bluefile and create labels as per PPP D206-667-107 chg 003
 270 - Identify and pack for shipping as per PPP D206-667-107 Location: FG035
Sikaflex 137526 exp 11/17

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D206-667-147TRN	1	11	0	0
230-Crosstubes	D2873-043 <u>F164360</u>	②	64	0	0
	D2873-045 <u>F164501</u>	②	65	0	0
	D2891-1 <u>164914-152</u>	②	14	0	0
	D3595-063-395 <u>F165357-0</u>	④	64	0	0
	MS20601-AD4W8 <u>5000554</u>	⑭	327	0	0
	MS21920-20 <u>138246</u>	④	2	0	0
250-Packaging	AN3-30A <u>5004407</u>	4	50	0	0
	AN5-32A <u>5004401</u>	4	130	0	0
	AN5-7A <u>5004404</u>	10	3,562	0	0
	AN970-4 <u>5004402</u>	12	167	0	0
	D206-667-017 <u>162130</u>	①	4	0	0
	MS21042L5 <u>5004400</u>	4	409	0	0
	NAS1143D05631 <u>5004399</u>	18	1,846	0	0

Part Specifications

Specifications could not be found.



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Note: DWG DSI9565 REV A, DSI9628 REV A, D206-667-147 REV A (DEO), IIN-D206-667 REV D revA 11.01.13
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100	DC	1 pcs	10/26/17	0.00	0.00	DC	
110	Packaging	1 pcs	10/26/17	0.00	0.00	Packaging1	
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160	QC	1 pcs	10/26/17	0.00	0.00	QC7	
170	QC	1 pcs	10/26/17	0.00	0.00	QC5	
180	Outsource	1 pcs	10/26/17	0.00	0.00	Outsource2	
190	Packaging	1 pcs	10/26/17	0.00	0.00	Packaging2	
200	QC	1 pcs	10/26/17	0.00	0.00	QC5	
210	Purchasing	1 pcs	10/26/17	0.00	0.00	Purchasing	
215	Packaging	1 pcs	10/26/17	0.00	0.00	Packaging2	
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250	Packaging	1 pcs	10/27/17	0.00	0.00	Packaging1	
260	QC	1 pcs	10/27/17	0.00	0.00	QC4	
270	Packaging	1 pcs	10/27/17	0.00	0.00	Packaging3	
280	QC21-FG	1 Ea	10/27/17	0.00	0.00	QC21	

Part Op 100 - Photocopy bluefile and create labels as per PPP D206-667-107 chg 003

Descriptions: 120 - Bend tube as per Dwg D206-667-147 using CNC bender program

140 - ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: Labels ***** 1- Drill holes & ream using drill Jig DT8541 & DT8542 as per Dwg D206-667-147. Drill all (3) top holes. Holes facing inboard.

***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: Labels ***** 2- Drill Fwd rivet holes using drill Jig DT8787 fwd as per Dwg D206-667-147. Note: Fwd side has 3x top holes.Facing inboard. 3- C'sink holes as per Dwg D206-667-147. Allow rivet to sit below surface to compensate for paint. 4- Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins .Drill ONLY 2 top holes ONLY plug most bottom holes to prevent accidental drilling. Drill holes and ream using drill Jig DT8541 & DT8542 as per Dwg D206-

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

667-147. Drill only the top (2) holes. ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: _____ ***** 5- Drill Aft rivet holes using drill Jig

150 - ***IMMEDIATELY AFTER GRINDING*** 1- PRESSURE WASH X-TUBE INSIDE AND OUT 2- ALODINE AND ACID ETCH X-TUBE INSIDE AND OUT AS PER QSI005.

180 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 038Or Issue P/O: _____ LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order

190 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Ensure copy of NDT results attached to work order.

200 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***

210 - ISSUE PO _____ *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____ ***MASK SCRIBE B# & P# AND VERIFY*** 1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube as per QSI 005 4.2 PRIME: Start Time: _____ Finish Time: _____ PAINT: DELFLEET BLUE _____ Start Time: _____ Finish Time: _____ CLEAR DELFLEET B _____

220 - Wrap in plastic bag to protect from scratches ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____

230 - 1-Abrade mating surfaces of support and crosstube with 400 grit sandpaper, clean the area with 4105S wash 'n' wipe 2-Install supports with Proseal 890 per DSI9565 and QSI 015 A/R Proseal 890 Batch: _____ 3- Torque bolts as per dwg 4-Install nut plates as per Dwg D206-667-147. Touch-up rivet heads with Imron paint.

240 - ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____

260 - ***VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____

270 - Identify and pack for shipping as per PPP D206-667-107 Location:FG035

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D206-667-147TRN	1	7	0	0
	D2873-043	2	68	0	0
	D2873-045	2	65	0	0
	D2891-1	2	4	0	0
	D3595-063-395	4	64	0	0
	MS20601-AD4W8	14	177	0	0
	MS21920-20	4	2	0	0
	AN5-30A	4	50	0	0
	AN5-32A	4	130	0	0
	AN5-7A	10	3,562	0	0
250-Packaging	AN970-4	12	67	0	0
	D206-667-017	1	4	0	0
	MS21042L5	4	109	0	0
	NAS1149D0563J	18	846	0	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

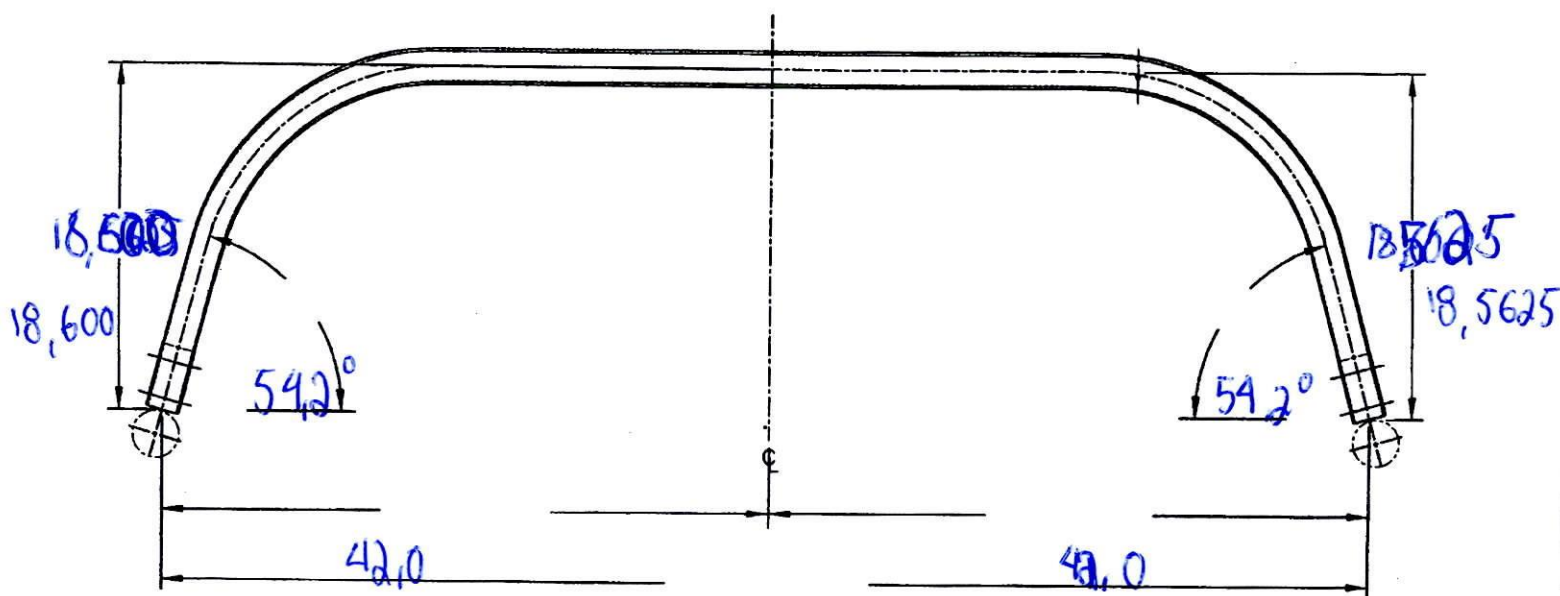
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabelled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

DART AEROSPACE LTD		Work Order:	166584
Description: Crosstube Mid Fwd (206L)		Part Number:	D206-667-107
Inspection Dwg: D206-667-147 Rev: A		Page 1 of 1	

Required Dimension	Min	Max
Height	18.34	18.60
1/2 Span	41.79	42.05
Angle	54°	56°
Total Span	83.59	84.09
Bending Passes	10	--
Crushing	--	6%



	Side A	Side B
Bending Passes		
Crushing	5.2%	5.7%
Comments		

QC15 Inspection	2B
Date	17-10-16

Rev	Date	Change	Revised by	Approved
A	12.02.15	New Issue	KJ	
B	12.04.16	Added bending, crushing dimensions	KJ	JP

Item	Qty -147	Part Number	Description
1	X	D206-667-147	CROSSTUBE ASSEMBLY (206L MID FWD)
2	1	D6002-115	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-045	NUT PLATE
5	2	D2891-1	SUPPORT
6	4	D3595-063-395	RUBBER CUSHION
7	4	MS21920-20	CLAMP (OR MS21920-21)
8	14	MS20601AD4W8	RIVET (OR NAS9302B-4-8)
9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTROM/BELL SPEC. 299- 947-100, TYPE II, CLASS 2 ADHESIVE)

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6002-115
FINISHED LENGTH = 99.84±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D206-667-147" AND BATCH NUMBER ON
INSIDE OF CUFF PER DART QSI 044 6.4 (VIBRATING STYLUS).
- 7) WEIGHT: 15.0 lbs (-507 = 12.84)
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY,
TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 10 PASSES. MAXIMUM TUBE FLATTENING DUE
TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2891-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI
015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-20 CLAMPS (OR -21) WITH D3595-063-395 RUBBER CUSHIONS TO SECURE
THE D2891-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS
ARE LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE
OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS
SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT
LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN
SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 1166584 M15
17-12

DEO ATTACHED

EQW 411-615
11.07.28

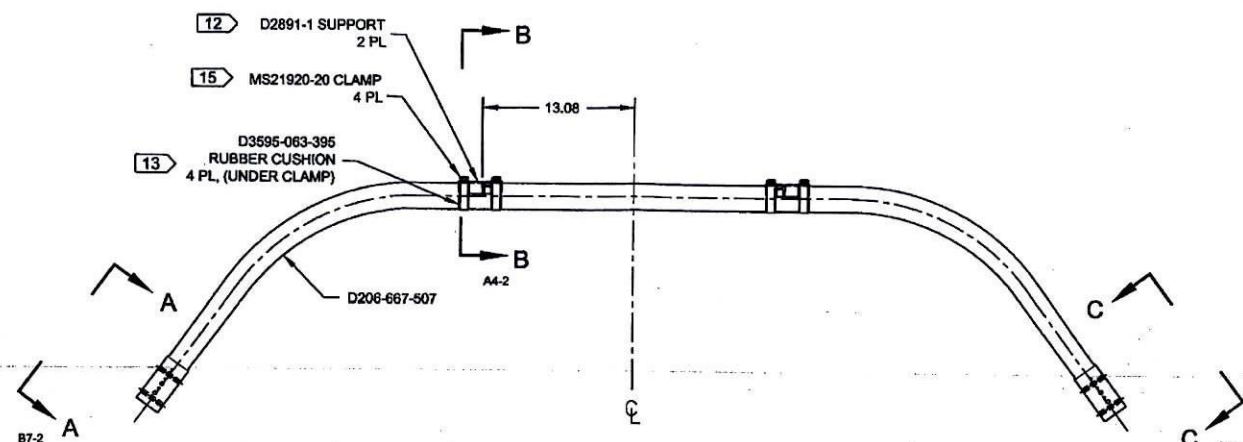
UNDER REVIEW
11/06/13

RELEASED
2011-05-23
JWP

A	NEW ISSUE	CP	10.11.23
REV.	DESCRIPTION	BY	DATE
DESIGN	92	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	92	REV. A SHEET 1 OF 4	
CHECKED	92	DRAWING NO. D206-667-147	
MFG. APPR.	92	TITLE CROSSTUBE ASSY (206L MID FWD)	
APPROVED	92	SCALE NTS	
DE APPR.	92	DATE 10.12.23	
COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR FOR CONSTRUCTION OF ANY OTHER PRODUCT WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

8 7 6 5 4 3 2 1

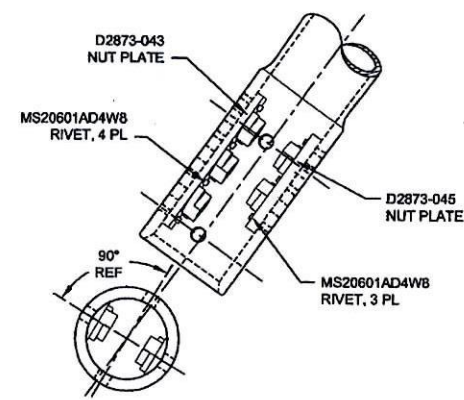
D
C
B
A



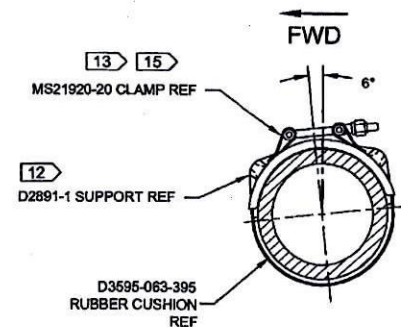
D206-667-147
ASSEMBLY DETAIL
(VIEW LOOKING FWD)

ECW #1.615
11.07.26
UNDER REVIEW
~~11/06/13~~
RELEASED
2011-05-24

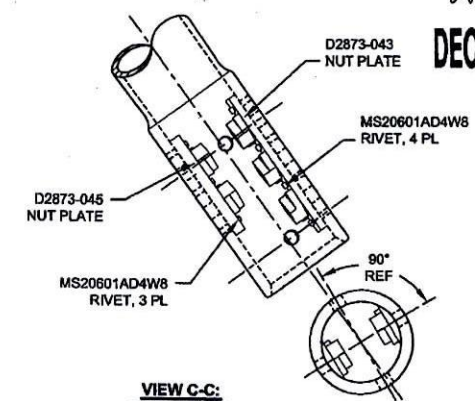
DEO ATTACHED



VIEW A-A:
CUFF DETAIL
SCALE 4X

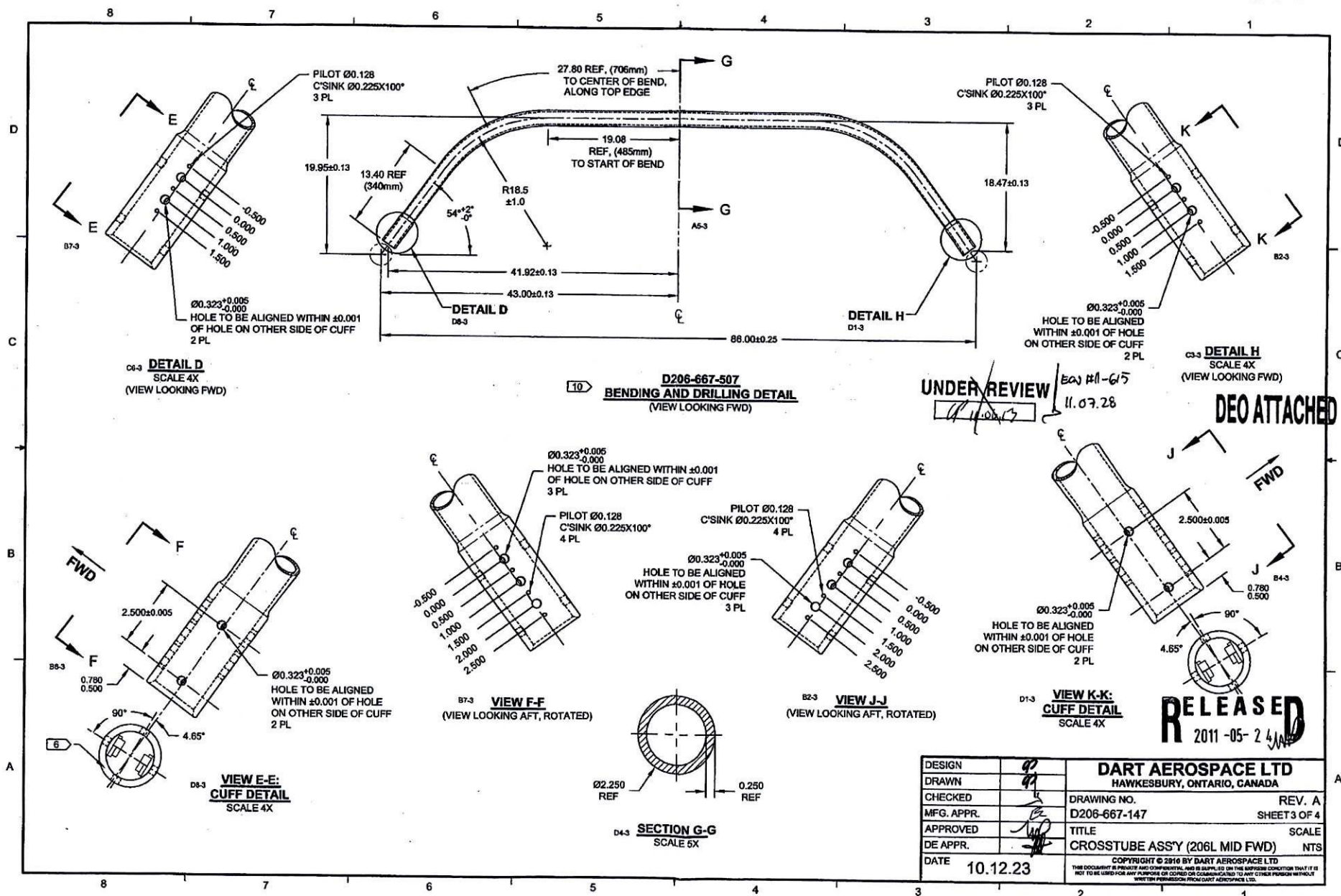


SECTION B-B
SCALE 5X

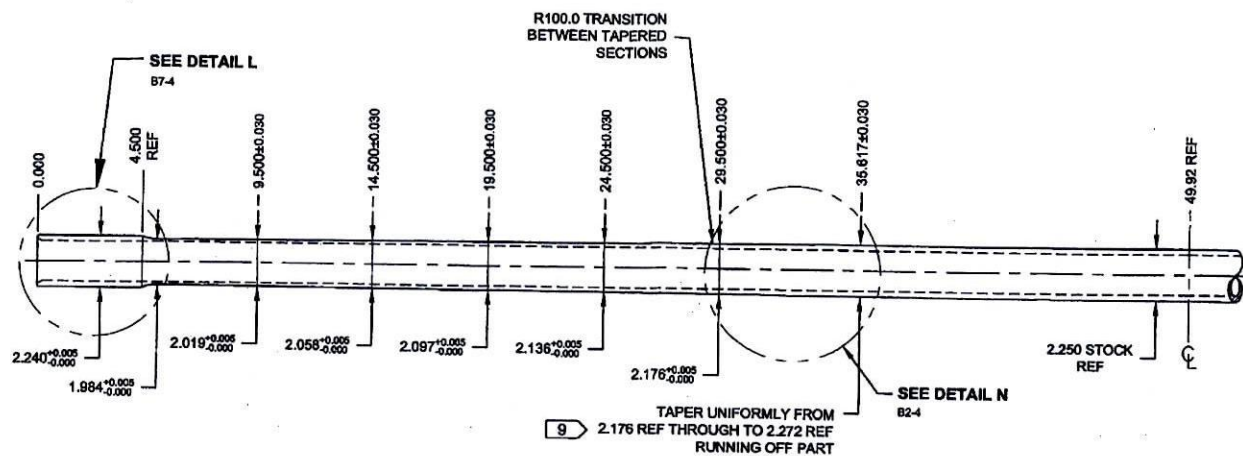


VIEW C-C:
CUFF DETAIL
SCALE 4X

DESIGN	90	DART AEROSPACE LTD	
DRAWN	99	HAWKESBURY, ONTARIO, CANADA	
CHECKED	5	DRAWING NO.	REV. A
MFG. APPR.		D206-667-147	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		CROSSTUBE ASS'Y (206L MID FWD)	NTS
DATE	10.12.23	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



8 7 6 5 4 3 2 1



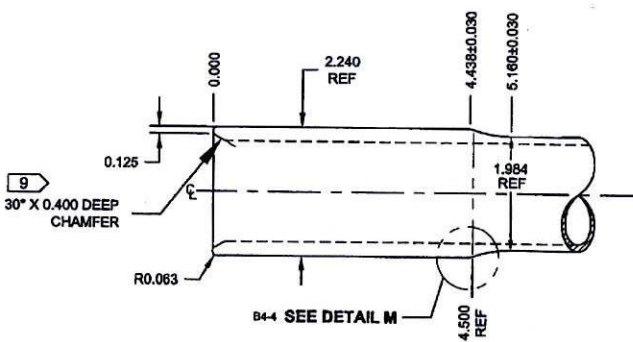
UNDER REVIEW

UP 11.06.13

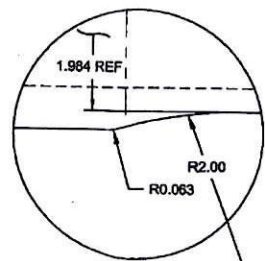
ECN # 11-615
11.07.20

TURNING DETAIL

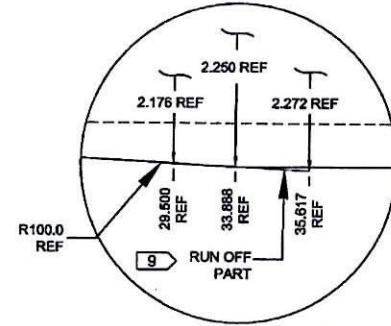
DEO ATTACHED



**DETAIL L:
CROSSTUBE CUFF**
NOT TO SCALE



**DETAIL M:
CUFF TRANSITION**
NOT TO SCALE



**DETAIL N:
TAPER RUN-OFF**
NOT TO SCALE

RELEASED
2011-05-13

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. A
MFG. APPR.		D206-667-147 SHEET 4 OF 4
APPROVED		TITLE SCALE
DE APPR.		CROSSTUBE ASS'Y (206L MID FWD) NTS
DATE	10.12.23	

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8 7 6 5 4 3 2 1

DRAWING NO. D206-667-147	TITLE CROSSTUBE ASS'Y (206L MID FWD)	REV. A	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D206-667-147-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>qp</i>	CHECKED <i>ADS</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 11.07.15	DATE 11.07.20	DATE 11.07.21	DATE 11.07.21		DATE 11.07.21		

PURPOSE:

REPLACE MAGNOBOND WITH PROSEAL.

CHANGE:

IS:

Item	Qty -147	Part Number	Description
9	A/R	PROSEAL 890 B-2	SEALANT, AMS-S-8802 CLASS B-2

WAS:

9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)
---	-----	----------------	---

NOTE 12 & 15, SHEET 1 IS AMENDED AS FOLLOWS:

IS:

- 12) TO INSTALL D2891-1 SUPPORT: ABRABE MATING SURFACE OF SUPPORT AND CROSSTUBE WITH 180-GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 890 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. **PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.**

WAS:

- 12) INSTALL D2891-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

RELEASED
2011-07-28
[Signature]

DRAWING NO. D206-667-147	TITLE CROSSTUBE ASS'Y (206L MID FWD)	REV. A	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D206-667-147-A-2	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED	MFG. APPR.	APPROVED	DE APPR.		
DATE 12.08.02	DATE 12.08.02	DATE 12.08.02	DATE 12.08.02	DATE 12.08.02	DATE 12.08.02	

PURPOSE:

ADD ELECTRICAL GROUNDING STRAP

CHANGE:

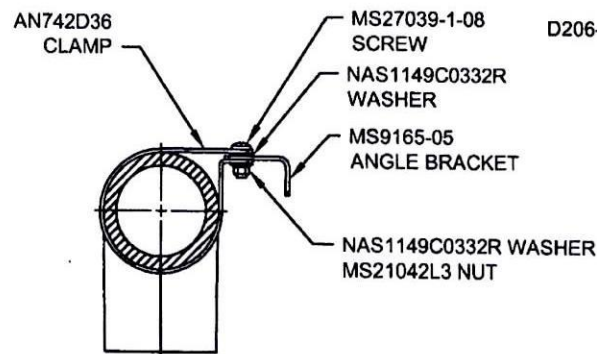
PARTS LIST:

ITEM	QTY -147	PART NUMBER	DESCRIPTION
1	X	D206-667-147	CROSSTUBE ASSEMBLY (206L MID FWD)
10	2	AN742D36	CLAMP
11	2	MS9165-05	ANGLE BRACKET
12	2	MS21042L3	NUT (OR MS21042-3)
13	2	MS27039-1-08	SCREW
14	4	NAS1149C0332R	WASHER (OR AN960C10L)

GENERAL NOTES:

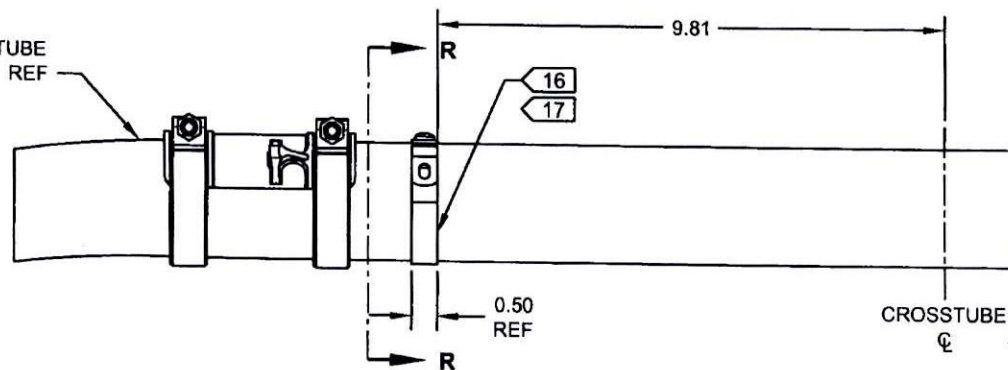
- 16) MASK AREA UNDER CLAMP PRIOR TO PAINTING
- 17) SEAL EDGES WHERE AN742D36 CLAMP MEETS WITH THE CROSSTUBE USING SIKAFLEX-241/-291 OR MIL-S-8802 CLASS B2 OR PROSEAL 890 SEALANT
- 18) PERFORM RESISTANCE CHECK TO ENSURE MAX RESISTANCE IS 10 MILLIOHMS

→ AFT



SECTION R-R

D206-667-507 CROSSTUBE REF



DETAIL P
BONDING STRAP INSTALLATION 2 PL

RELEASED
12.08.17
ECN 12-631

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**skyservice****Work Order Traveler**

Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO33666	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: PO038082
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON 4 CROSSTUBES AS PER PO038082

4 FWD CROSSTUBES , P/N# D206-667-107BL , JOB SHEET# 166579, 166580, 166583, 166584

SPA-10-25

Action Taken:						Date:	Initial/Stamp:
LPI C/O IAW ASTM E-1417M-13 ***NO CRACK FOUND*** PEN. ZL-56, MPO13600, CLEANER SKC-S MPO13923 , DEV. MPO11715 , UV LIGHT M-20142						OCT 19 2017	
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp 	Date: OCT 19 2017
Name: RAFIK MELIKIAN		



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO038138

Supplier: ATE003-VC
Atelier Debosselage
358 Principale
Calumet
QC
J0V 1B0 Canada
Phone: 819 242 5633

PO No: PO038138
PO Date: 10/24/17
Due Date: 10/24/17
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items												
Line Item	Job	Part	Rev	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	166583	D206-667-107BL	-	Fwd Crosstube - Mid Height 206L / L1 / L3 / L4, Blue		Firmed	10/24/17	1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
Line Item Note: painted blue												
	166580					Firmed	10/25/17	1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
	166579					Firmed	10/26/17	1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
	166584					Firmed	10/27/17	1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
Sub Total:								4	0	4		\$900.00
											Grand Total:	\$900.00

Order Notes

LIQUID PENETRANT INSPECTION AS PER QSI 038 OR LPI AS PER ASTM 1417M-13

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/24/17 2:14 PM dart.lavoie.chantal